VINTAGER®

GM110

ENGLISH

User's Manual

Version 1.0 August 2001

BEHRINGER

INSTRUMENT AMPLIFICATION

SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of electric shock, do not remove the cover (or back). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

DETAILED SAFETY INSTRUCTIONS:
All the safety and operation instructions should be read before the appliance is operated.
Retain Instructions:
The safety and operating instructions should be retained for future reference.
Heed Warnings:
All warnings on the appliance and in the operating instructions should be adhered to.
Follow instructions:
All operation and user instructions should be followed.
Water and Moisture:
The appliance should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool etc.).
Ventilation:
The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
Heat:
The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
Power Source:
The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
Grounding or Polarization:
Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
Power-Cord Protection:
Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles and the point where they exit from the appliance.
Cleaning:
The appliance should be cleaned only as recommended by the manufacturer.
Non-use Periods:
The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
Debris and Liquid Entry:
Care should be taken that debris and/or liquids do not enter the enclosure through openings.
Damage Requiring Service:
The appliance should be serviced by qualified service personnel when:
- The power supply cord or the plug has been damaged; or
- Debris or liquid has entered the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped, or the enclosure damaged.

Servicing:
The user should not attempt to service the appliance beyond that which is described in the operating instructions. All other servicing should be referred to qualified service personnel.

FOREWORD

Dear Customer,

Welcome to the team of VINTAGER users and thank you very much for expressing your confidence in BEHRINGER products by purchasing the VINTAGER GM110.

It is one of my most pleasant tasks to write this letter to you, because it is the culmination of many months of hard work delivered by our engineering team to reach a very ambitious goal: To present you with a really excellent practice/backstage amp that does not only produce an out-of-the-ordinary sound but also features a revolutionary design concept. Your GM110 combines high performance with a wealth of first-class effects. The task to design the VINTAGER certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. It also meant a lot of work and night shifts to accomplish this goal. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when everyone who participated in such a project can be proud of what we've achieved.

It is our philosophy to share our joy with you, because you are the most important member of the BEHRINGER family. With your highly competent suggestions for new products you've greatly contributed to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely favorable price. All of this will enable you to fully unfold your creativity without being hampered by budget constraints.

We are often asked how we can make it possible to produce such high-grade devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers, mean large sales volumes enabling us to get better conditions of purchase for components, etc. Isn't it only fair to pass this benefit back to you? Because we know that your success is our success too!

I would like to thank everyone who has helped make the VINTAGER possible. All have made their own personal contribution, beginning with the developers, through the many employees of our company and up to you, the user of BEHRINGER products.

My friends, it's been worth the trouble!

Thank you very much,

Uli Behringer

VINTAGER®

30-Watt Analog Modeling Guitar Combo with Speaker Simulation and Direct Out

▲ Powerful 30-Watt RMS amplifier

▲ Original JENSEN 10" 35-Watt vintage-type guitar speaker

▲ Three authentic classic amp models, three speaker simulation models plus three gain modes, all individually selectable and based on pure analog circuitry—no digital components

▲ Revolutionary DYNAMIZER® circuitry captures every nuance of your playing and lends tube-like compression to your tone

▲ Extensive master section with powerful 3-band EQ and master level control

▲ Wide-range drive control for super-fat sounds with any pickups

▲ Balanced direct out with XLR connector and ground lift delivers full preamplified sound including all amp, speaker, gain mode, drive, EQ and level settings for direct recording or connection of an external power amp

▲ Serial effects loop allows integration of external effects processors

▲ Additional 8 Ohm speaker out with automatic internal speaker mute

▲ Massive power supply ensures excellent pulse response

▲ Rugged construction for years of trouble-free use

▲ Manufactured under ISO9000 certified management system

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NOTE!

☞ **We would like to draw your attention to the fact that extreme volumes may damage your hearing and/or your headphones. Turn down all LEVEL controls before you switch on the unit. Always be careful to set the appropriate volume.**

1. INTRODUCTION

Thank you for purchasing the VINTAGER GM110. The GM110 is a modern Guitar Workstation that sets new standards in practice amp engineering. When developing the GM110, our primary objective was to reproduce the authentic sound of analog guitar amplifiers and at the same time provide you with a tool for straightforward recording. The concept of intuitive operation remained a central consideration.

BEHRINGER is an audio engineering company that has been successfully developing products for studio and live applications for many years. Our range of products includes microphones and a variety of 19" devices (compressors, enhancers, noise gates, tube processors, headphone amps, digital effects devices, DI boxes, etc.), as well as various monitoring and P.A. speakers, plus professional live and recording consoles. The name BEHRINGER stands for no-compromise quality, fully-featured products and exemplary services—even years after purchase—as well as sensationally low prices, which permit all ambitious musicians to fulfil their true potential.

Our products have great flexibility, which has become a particularly important factor in the music business in recent years. In this day and age, a guitarist should be able to offer a broad range of sounds, but should still be able to adapt to different kinds of applications at short notice: home recording, studio, live concerts. For this reason, it has always been our prime concern to give you a GM110 that offers you maximum tone diversity, but that can still be operated intuitively and quickly—no matter what kind of style you play.

Unfortunately, conventional guitar amplifiers are often not fully designed and developed. Moreover, many manufacturers of traditional-style guitar amps shy away from the use of state-of-the-art technology. The VINTAGER GM110, on the other hand, is a pioneering guitar amp consisting of sophisticated components and incorporating the very latest circuit technology. Then with the advanced technology you can use the GM110 as easily and straightforwardly as a classic combo amp, while enjoying the functionality and reliability of a modern guitar amp. We suggest you get down to some serious music with the GM110 so you can learn about each of its many functions and exhaust its every last drop of potential.

As technology advances, one has to keep track of the latest technological breakthroughs to avoid falling by the wayside. We have continuously improved the VINTAGER GM110 and many of your ideas have been incorporated into the finished product. We have spared no amount of expense and no amount of effort testing different types of circuitry and speakers and are entirely satisfied with the results. After all, it is in our interests to present you with a fully designed and fully developed product that meets your requirements in full. What's more, the GM110 will be a useful tool for years to come.

We've packed our entire experience in this latest generation of guitar amps. Many people contributed to this intense development project: studio musicians, collectors of vintage guitar amps, music and guitar lovers alike. We even invited guitar amp tuning experts to help us develop an amplifier that unites the very best of both worlds:

- ▲ Sophisticated analog technology with a "feel factor" that only analog technology can provide.
- ▲ The perfect simulation of specific sound nuances of classic amp designs makes up for the drawbacks (inability to record directly, great weight, great expense of different amps and boxes).
- ▲ Latest analog modeling circuit technology to give you a broad range of modern high-gain and vintage-type guitar sounds, as well as loudspeaker simulations.
- ▲ A solid and robust construction that withstands even the roughest handling and that, thanks to its lightness and small size, nevertheless offers maximum freedom.
- ▲ Intuitive operation to enable you to focus on what really matters: your music!

☞ **The following manual first describes the terminology used so that you can fully understand the GM110 and its functions. Please read the manual carefully and keep it for future reference.**

1.1 The design concept

The philosophy behind BEHRINGER products guarantees a no-compromise circuit design and employs the best choice of components. The operational amplifiers employed by BEHRINGER and used in the VINTAGER GM110 are exceptional: they boast extreme linearity and very low distortion characteristics. To complement this, the choice of components includes low-tolerance resistors and capacitors, high-quality potentiometers and switches, and several other carefully selected elements.

The GM110 uses SMD technology (Surface Mounted Device). These subminiature components adapted from aerospace technology, allow for an extreme packing density to further improve the overall reliability.

The robust steel-plate enclosure of your VINTAGER GM110, with its generously dimensioned power supply, ensures that your GM110 will never fail on the stage—even when the going gets tough. The enclosure is made of high-grade, environmentally-friendly MDF wood, which consists of multiple tongued/glued layers.

1.1.1 DYNAMIZER technology and analog amp modeling

The amplification of electrical instruments is a crucial point at which the really good instruments prove their mettle. This is because, unlike signals that have been mixed and mastered, signals from electrical instruments generally have extremely high signal peaks, which push the dynamics of an amplifier circuit to their limits. An amp's reaction to these is thus one of its essential properties.

This is why we have fitted the GM110 with our unique patent pending DYNAMIZER preamp stage. With signal peaks, this guarantees a lively sound that delivers a powerful punch, even when the amp is working at its performance limit. In conjunction with our analog amp modeling, you not only have amazingly authentic tube sounds, but also dynamic properties that are characteristic of an amplifier of this kind. Create crystal-clear guitar sounds with transparency, warmth and compression typical of a tube. With increasing distortion, the sound remains lively and powerful without losing any of its impact.

You always maintain complete control of the volume and can thus even record your characteristic rehearsal-room sound when at home.

1.1.2 JENSEN loudspeakers

Since Peter Jensen produced his first loudspeaker in 1923, the company JENSEN has reshaped the entire communication industry. With the increasing demand for innovative guitar and bass amps in the fifties and sixties, the demand for JENSEN also grew. All over the world, JENSEN was considered the industrial standard, and the JENSEN sound was synonymous with rock 'n' roll. Today, too, these vintage loudspeakers are much coveted by top musicians and collectors the world over. High-profile manufacturers from the USA and Great Britain used JENSEN loudspeakers for their top-of-the-range models. It is indisputable that loudspeakers have an enormous influence on the sound of a guitar amp. And this is why JENSEN has continued to manufacture and further develop these legendary loudspeakers, which have contributed to the history of modern music. Today, these loudspeakers are manufactured in state-of-the-art production facilities located throughout Europe.

1.2 Before you begin

The GM110 was carefully packed in the factory to guarantee safe transportation. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage, which may have occurred during transit.

☞ **If the unit is damaged, please do not return it to BEHRINGER, but notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be valid.**

Be sure that there is enough space around the unit for cooling and please do not place the VINTAGER GM110 on high temperature devices such as radiators, etc. to avoid overheating.

☞ **Before you connect your GM110 to the mains, please make sure that your local voltage matches the voltage required by the unit!**

Three triangular markings can be found on the circuit breaker at the AC power connection socket. Two of these three triangles will be aligned with one another. The VINTAGER GM110 is set to the operating voltage shown next to these markings and can be switched over by twisting the circuit breaker by 180°. **IMPORTANT: this does not apply to export models designed only for 115 V AC!**

The mains connection is made by using the enclosed mains cable and a standard IEC receptacle. It meets the necessary international safety certification requirements.

☞ **Please make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor of the unit or of the AC power cable. You can eliminate humming problems caused by grounding at the D.I. OUT by pressing the GND switch (groundlift, 16).**

1.3 Control elements

1.3.1 Front panel

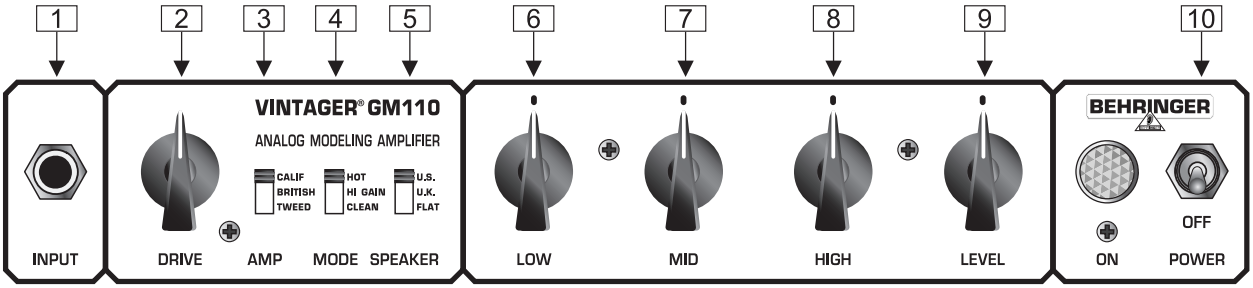


Fig. 1.1: Front panel control elements

1 *INPUT* is the GM110's 1/4" jack input for your guitar. Use a commercial 1/4" jack mono cable (not from a DIY shop, but from a specialist music dealer).

2 The *DRIVE* control determines the amplification in the input section. It allows you to finely tune the GM110 preset to the output level of your guitar pick-up (depending on selected amp, mode and speaker combination) in order to achieve the desired degree of distortion.

☞ **Use the DRIVE control to set the desired sound and use the LEVEL control to set the desired volume!**

3 The *AMP* switch enables you to emulate the basic sounds from three guitar amp designs; these are based on classic amp models and will be familiar to you from numerous recordings. The TWEED setting delivers transparent sounds, clear as a bell, with dynamic bass response. The BRITISH setting has an aggression that comes straight from the heart and is powerful with an unmistakable ability to make itself heard. Fuller and more balanced, and yet subtly differentiated, the CALIF(ORNIAN) setting is particularly suitable for singing lead sounds.

4 With the *MODE* switch, you choose between one of three possible gain settings (CLEAN, HI GAIN and HOT) to achieve the basic sound selected with the AMP switch.

5 The *SPEAKER* switch provides you with simulations of two classic guitar loudspeakers: 4x12"-loudspeakers in a closed back enclosure (U.K.), and 2x12" loudspeakers, open back (U.S.). In addition, we have also installed a further frequency response correction (FLAT) that is specially adapted to the GM110 enclosure.

6 The *LOW* control in the EQ section enables you to boost or cut the bass frequencies.

7 With the *MID* control, you can boost/cut the midrange frequencies.

8 The *HIGH* control governs the upper frequency range.

9 With the *LEVEL* control, you determine the overall and headphone volume of your VINTAGER GM110. It should be set fully to the left when you operate the POWER switch or disconnect the instrument cable from the guitar or amp.

10 Use the *POWER* switch to put the GM110 into operation.

1.3.2 Rear panel

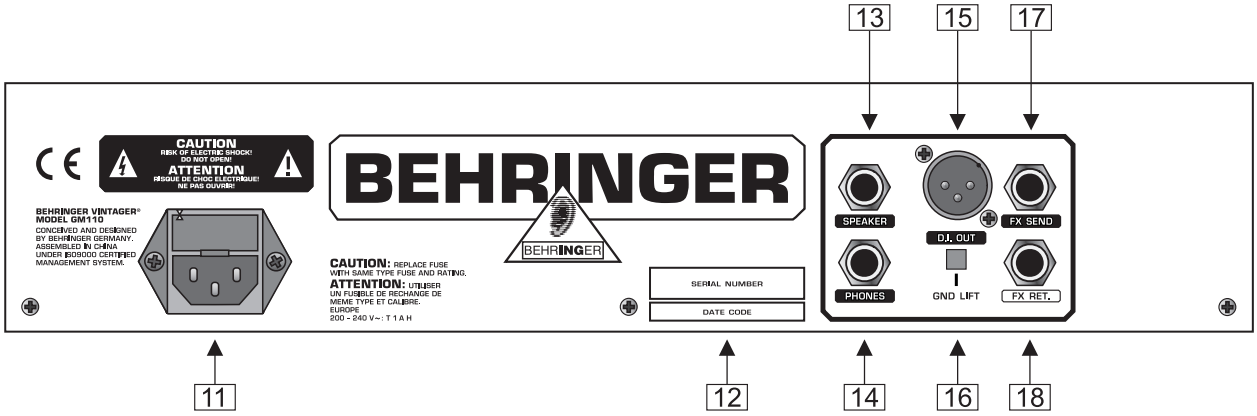


Fig. 1.2: Rear panel connectors

11 *FUSEHOLDER / VOLTAGE SELECTION*. Before you connect the device to the network, please make sure that your local voltage matches the voltage indicated on the unit. Blown fuses may only be replaced by fuses of the same type and rating. Some models allow for inserting the fuse holder in two different positions in order to switch over from 230 V to 115 V operation, and vice versa. Please note that, for 115 V operation outside Europe, you need to use a fuse of a higher rating. The network connection is made via a *STANDARD IEC INLET SOCKET*. Use the enclosed power cord to connect the unit to the mains.

12 *SERIAL NUMBER*. Please take the time to fill out the warranty card within 14 days of purchasing the device, otherwise you will lose your extended warranty. Or simply register online at www.behringer.com.

13 You can use the *SPEAKER* socket to connect an additional loudspeaker to your VINTAGER GM110. The external loudspeaker should have an impedance of 8 Ohms. When using this socket, the internal loudspeaker is muted. For additional information on connecting an external loudspeaker, refer to chapter 4.1.

14 The 6.3 mm *PHONES* jack allows you to monitor the GM110's audio signal with a pair of commercially available headphones. As soon as this socket is used, the loudspeaker will be muted.

☞ **Since speakers can have quite an impact on the sound of a guitar amp, both the headphones and D.I. OUT signals are frequency-corrected (with speaker correction). Without this frequency correction extreme treble frequencies would deteriorate the sound.**

☞ **Low-impedance headphones may begin to produce distortion at certain volume levels. In such cases, please reduce the volume by turning back the LEVEL control.**

15 At the *D.I. OUT* output (balanced XLR socket), you can tap the audio signal of the VINTAGER GM110 in order, for example, to feed it into a mixing console and record it. This audio signal is frequency-corrected (Speaker Simulation). The level of the D.I. OUT (max. +22 dBu) is designed to provide simple connection to mixers or other audio devices.

16 With the *GND LIFT* switch, you can unplug the electrical bonding of the D.I. OUT, if ground loop or humming problems occur.

17 *FX SEND* is the output socket for the serial effects path of the GM110. You can use this to loop in the external effects (e.g. a wah-wah pedal) or to connect an external power amplifier, should you require a greater output. The internal signal path will not be interrupted. The frequency-corrected signal at the FX SEND socket is affected by all GM110 controls.

18 The output of the looped-in effects device is connected to the *FX RETURN* socket. When you connect a cable to this socket, you interrupt the internal signal path.

☞ **Please note that, when using the serial effects path, the effects device will control the level of wet (affected) signal to dry (direct) signal.**

2. WIRING TIPS

2.1 Standard set-up consisting of guitar, external effects device and simultaneous recording

To use your VINTAGER GM110 for rehearsals, in the studio or on stage, please wire up the unit as shown in fig. 2.1. Of course, you can also use a wah-wah or other pedal effect instead of the external 19" effects unit. Connecting the headphones will mute the built-in speaker.

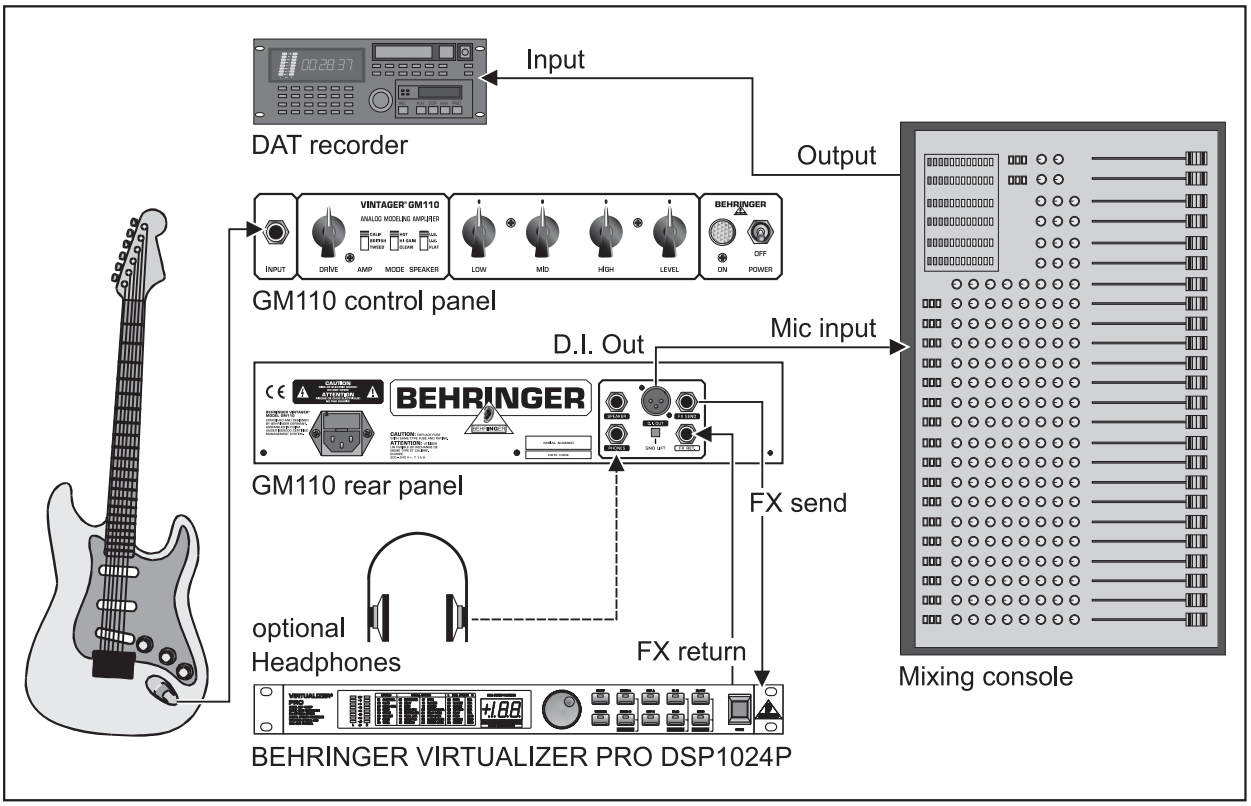


Fig. 2.1: Standard set-up for recording with the VINTAGER GM110

If you wish to use a guitar tuner, please connect it to the FX SEND of your VINTAGER GM110. If there is no further effects device connected, you can leave the FX RETURN as it is. When using an external effects device, the tuner should be placed before the effects device to prevent the tuner from receiving any effects signal.

3. HISTORICAL BACKGROUND by Neville Marten (Guitarist Magazine)

The guitar amp: your tone generator

Many guitar players think of their amplifier as the least important link in their musical chain. Sure, everyone needs the right guitar, with the right finish, pickups and tremolo; and, of course, effects these days are so important in looking and sounding cool.

But what of the humble guitar amp? Is it just an ugly box that stands behind you, a heavy hindrance that's just a drag to get into and out of the car? No, it's your powerhouse, a tone generator that should work as an equal member with you, your guitar and effects in the creation of the best possible sound.

Ever since the 1940s, when a radio repairman in Orange County California started customizing tube radio circuits for the new breed of electric guitarists, guitar amps have been evolving into what we see today. Great American names like Fender™, Ampeg™ and Gibson™ supplied small-output amplifiers to the guitarists of the '40s and '50s, creating the sound of electric jazz, rock'n'roll and country music; a sound that's still as fresh as ever at the dawn of this new millennium.

As the '50s became the '60s, the British sound was born with Vox™ producing small-powered valve amps for groups like The Shadows, then later The Beatles and The Rolling Stones, The Hollies and The Hermits. Then, in the mid-'60s a drummer from London was asked by some budding musicians to build them some amplification. Jim Marshall™ took the basic American design and using British components and speakers, created higher Wattage amps and multi-speaker cabinets to give bands like The Who, Cream and The Jimi Hendrix Experience the power to begin their assaults on the rock stadiums of the world.

Amp design has come a long way since then. Multi-channels and cascading gain stages, as pioneered by Randall Smith and his Mesa Boogie™ amps, are found in the majority of stacks and combos built by amp manufacturers all over the world today. Modern, solid-state circuits and digital effects are now commonplace and in some instances work successfully on their own, or hand in hand with classic tube designs, to create versatile performing instruments for working guitarists. Other manufacturers are looking back to the old ways, with hand-wired, vintage-style "boutique" amps that can cost the earth.

Whichever option you choose, the ears of discerning musicians recognize that, behind the bells, whistles and hype, there must be a great-sounding amplifier—a real musical tool that not only uses the best of today's technologies, but pays its respects to the great pioneers that have gone before.

(We would like to thank Mr. Neville Marten, the editor of Guitarist Magazine, for this little essay about the history of guitar amp development.)

Fender™, Ampeg™, Gibson™, Vox™, Marshall™, Mesa Boogie™ and the names of musical artists and groups are all registered trademarks of their respective owners, which are in no way associated or affiliated with BEHRINGER.

4. AUDIO CONNECTIONS

The BEHRINGER VINTAGER GM110 is fitted with audio inputs and outputs in the form of 1/4" mono jacks. The exceptions to this are the headphones output and the D.I. OUT.

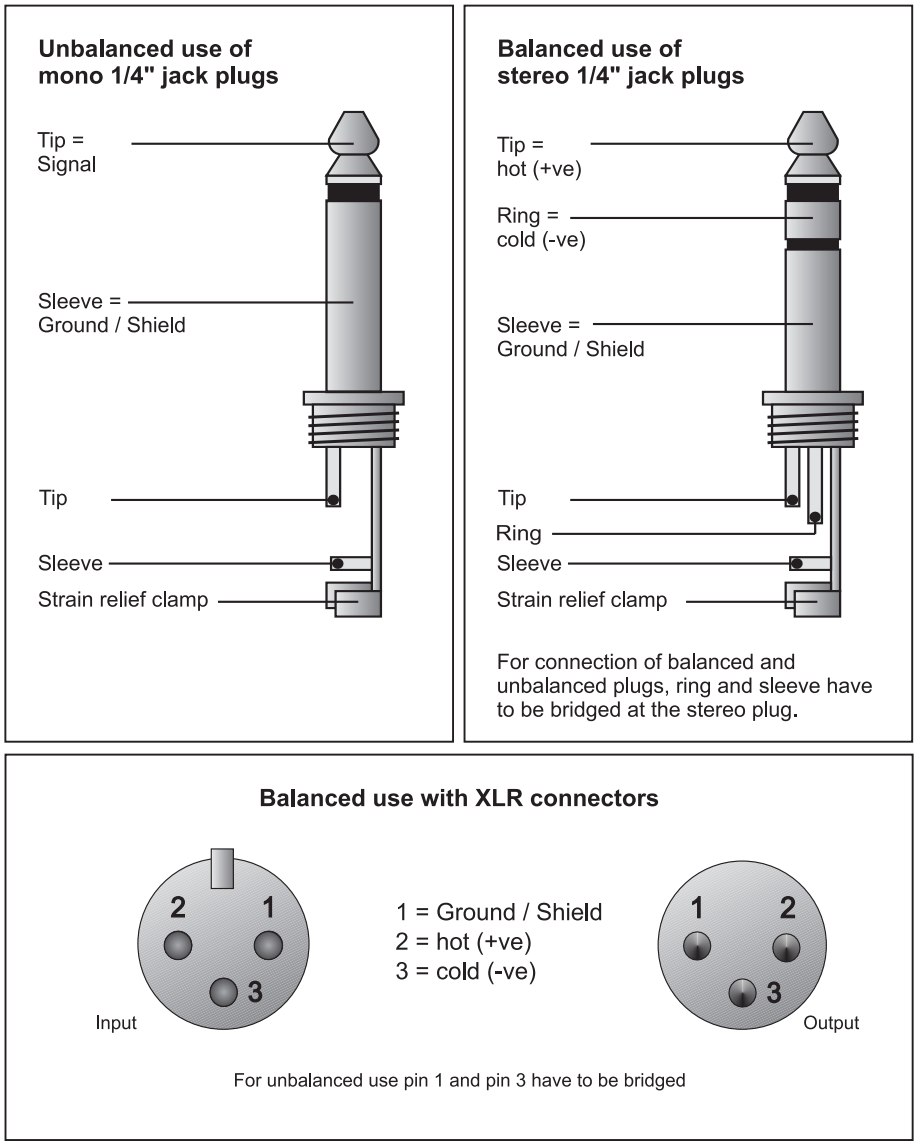
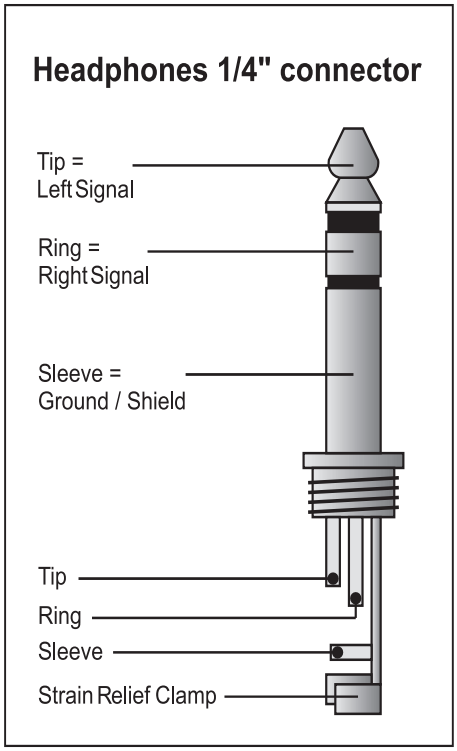


Fig. 4.1: Different plug types



4.2: Wiring of a stereo headphones plug

☞ **Please ensure that only qualified personnel install and operate the device.**

☞ **Please make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor of the unit or of the AC power cable. Instead, you can eliminate hum problems caused by grounding (e.g. when connected to a mixing console) by pressing the GND switch (groundlift, 16).**

4.1 Loudspeaker connection

The GM110 features a loudspeaker connection (mono jack socket) that allows you to hook up a supplementary speaker. Optimum adaptation of the amp to the loudspeaker is ensured with an 8 Ω loudspeaker.

You can also connect speakers with lower impedances. However, this could trigger the power stage protective circuitry on your VINTAGER GM110. With too high an impedance load, the maximum power output will drop in proportion to the resistance connected.

☞ **Do not use an instrument cable to connect an external loudspeaker, rather use a special loudspeaker cable. This will prevent any unnecessary losses of sound and output.**

5. SPECIFICATIONS

AUDIO INPUTS

Guitar input		
	Connector	1/4" mono jack socket
	Type	RF filtered input
	Input impedance	approx. 1 MΩ unbalanced
FX return		
	Connector	1/4" mono jack socket
	Input impedance	approx. 1 MΩ unbalanced

AUDIO OUTPUTS

FX send		
	Connector	1/4" mono jack socket
	Type	Low-impedance line level output
	Output impedance	approx. 100 Ω unbalanced
D.I. Out		
	Connector	XLR
	Type	Balanced, low-impedance line level output
	Output impedance	approx. 100 Ω
	Max. output level	+22 dBu

LOUDSPEAKER OUPUT

Connector	1/4" mono jack socket
Load impedance (nom.)	8 Ω

SYSTEM SPECIFICATIONS

Power amp output	30 Watts RMS into 8 Ω

LOUDSPEAKER

Type	10" Vintage loudspeaker, model JENSEN JCH10/35
Impedance	8 Ω
Power handling	35 Watts

POWER SUPPLY

Mains voltage	USA/Canada	120 V ~, 60 Hz
	U.K./Australia	240 V ~, 50 Hz
	Europe	230 V ~, 50 Hz
	General export model	100 - 120 V ~, 200 - 240 V ~, 50 - 60 Hz
Power consumption	50 W @ 35 W / 8 Ω; 90 W maximum	
Fuse	100 - 120 V ~: **T 2 A H**	
	200 - 240 V ~: **T 1 A H**	
Mains connection	Standard IEC receptacle	

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	approx. 15" (381 mm) x 14 ½" (369 mm) x 9 ½" (242 mm)
Weight	approx. 12.5 kg

BEHRINGER is constantly striving to maintain the highest quality standards. Modifications may be made to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

6. WARRANTY

§ 1 WARRANTY CARD/ONLINE REGISTRATION

To be protected by the extended warranty, the buyer must complete and return the enclosed warranty card within 14 days of the date of purchase to BEHRINGER Spezielle Studiotechnik GmbH, in accordance with the conditions stipulated in § 3. Failure to return the card in due time (date as per postmark) will void any extended warranty claims.

Based on the conditions herein, the buyer may also choose to use the online registration option via the Internet (www.behringer.com or www.behringer.de).

§ 2 WARRANTY

1. BEHRINGER (BEHRINGER Spezielle Studiotechnik GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not due to normal wear and tear and/or improper handling by the user, BEHRINGER shall, at its sole discretion, either repair or replace the product.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

§ 3 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

§ 4 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement by BEHRINGER under the terms of this warranty will be repaired or replaced within 30 days of receipt of the product at BEHRINGER.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user.

This also applies to defects caused by normal wear and tear, in particular, of faders, potentiometers, keys/buttons and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

- misuse, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.
- connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
- damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

§ 5 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 6 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

§ 7 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

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